

APPLIED ICT

<p>Paper 9713/01</p>

<p>Written A</p>

General comments

It appeared that whilst some candidates had been better prepared than in the summer there were still many candidates who were underprepared for this examination. There were a number of candidates who appeared to lack the ability to perform well at this level. A number of candidates seemed to have rote learned answers from the specimen paper. In this paper, as with any exam paper at this standard, candidates are required to show a level of understanding as well as a depth of knowledge. This cannot be achieved by simply repeating bullet points from previous mark schemes. The points listed on mark schemes are often a summary of the knowledge required to answer the question and should not be interpreted as an answer in itself. Candidates are required, in 'discuss' and 'explain' questions, to expand on the bullet points given in the mark scheme not just repeat them. A good example of this can be found in the last question in the exam paper. In a similar question on the specimen paper a point on the mark scheme, referring to flyers, was 'target a specific audience'. A number of candidates provided this response to **Question 5e** without showing any understanding of the concept and some even gave it as a disadvantage when it is clearly intended to be an advantage. There were numerous examples of this type of approach in other questions. Centres are advised that candidates should write in sentences in order to show their understanding of the topic. A number of candidates referred to the scenario and phrased their answers accordingly; several did not, however. Centres are reminded that this is Applied ICT and candidate responses should relate to the scenario.

Candidates found great difficulty with questions relating to newspaper production, the use of robots, technical documentation, phone conferencing and rather surprisingly the use of ICT in education.

Comments on specific questions

Question 1

- (a) Many candidates did well on this question and were able to describe at least two steps in the process.
- (b) Most candidates seemed to have no understanding of the role of computers in the production of newspapers.
- (c) Very few candidates showed any understanding of the use of satellites in fax transmission. Many candidates did not seem to understand that the use of email would still be using the phone lines which were causing the problem in the scenario and gave this as their answer.

Question 2

- (a) Most candidates did well on this question naming at least three rules.
- (b) The majority of candidates concentrated on just the one aspect of data protection, namely the need for security and were thereby limited to one mark.
- (c) Most candidates did very well on this question and related their answers, successfully, to the scenario.

Question 3

- (a) Candidates did very poorly on this question. There seemed to be little understanding of the technical aspects of the use of robots in this type of process. Many candidates either gave a general description of how the lorries could be loaded which could have applied to humans loading them or gave an answer related to the question on the specimen paper.
- (b) A number of candidates provided answers at IGCSE Level rather than the AS Level required. Candidates also failed to apply their answer to the scenario. 'don't take breaks' was a popular answer but this would not really be relevant in loading lorries as the process would be interrupted quite often as lorries departed and arrived. In addition, at this level it is expected that candidates are aware of the interruptions which could be caused such as workers striking or shift changeovers as opposed to the notion of taking breaks. Candidates often referred to accuracy of robots. This is an aspect of robots work which would not really apply in this scenario as loading lorries with cardboard boxes does not require any additional accuracy than a human could provide.
- (c) It was disappointing to see that most candidates do not appear to understand the use of microprocessors in a temperature control scenario.

Question 4

- (a) Many candidates referred to the use of normal, abnormal and extreme data when the syllabus clearly combines the use of abnormal and extreme data as one approach. It is expected at this level that candidates describe what is meant by these terms. A small number of candidates seemed to be confused by the question and just described types of test data without mentioning that they would be used within a testing strategy. Candidates must answer the question given to them rather than trying to provide a response that shows some knowledge but does not answer the question.
- (b) Most candidates did not answer the question. The question asked candidates to describe how CAL would help with learning and assessment. Instead, the majority of candidates just provided a list of the features of CAL without saying how these would be helpful to candidates or teachers.
- (c) This was a very poorly answered question with candidates unable to answer in sufficient detail. Many candidates did not read the question and wrote about technical documentation and user documentation as two types of documentation. This was an example of candidates answering a question they would like to have appeared rather than answering the question provided. Very few candidates appeared to have knowledge of the two different types of technical documentation
- (d) Some candidates did not appear to understand the difference between a medium and a device. A small number referred to drives rather than discs. Many, however, referred to a database as a medium. Most candidates did not appear to fully understand the concept of indexed sequential storage of data.

Question 5

- (a) Many candidates seemed to lack detailed knowledge of the storage capacity of blu-ray discs and DVD RAM and seemed to be unaware of their uses.
- (b) Candidates did not appear to understand the concept of phone conferencing, how one is called and how it would operate. Many thought that it was a type of video conferencing.
- (c) This was another question where candidates did not answer the question. A number wrote about aspects of the use of PDAs without giving the benefits of its use. Some candidates appeared to have little knowledge of what a PDA is.
- (d) This was well answered by most candidates.

- (e) This question was fairly well answered but there were a number of candidates who gave lists rather than any discussion of the relative advantages of the different methods which could be employed. A number of candidates repeated points from the specimen paper mark scheme without showing any great understanding of the methods. Despite the scenario clearly stating that the firm would use a computer to advertise, a number of candidates referred to television, newspaper and radio advertising without saying what the role of a computer would be in the process.

APPLIED ICT

<p>Paper 9713/02</p> <p>Practical Test A</p>
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General comments

The majority of candidates completed all elements of the paper. There was a wide range of results both within and between centres. As with the first sitting of this examination in June 2008, there were elements of all sections of the question paper that caused candidates some problems. This paper gave a good spread of marks. Candidate errors were spread evenly over the sections of the paper.

A very small number of candidates failed to print their name, Centre number and candidate number on each document submitted for assessment. Without clear printed evidence of the author of the work, Examiners were unable to award any marks for these pages. It is not acceptable for candidates to annotate their printouts by hand with their name as there is insufficient evidence that they are the originators of the work and hadn't simply collected the work of another candidate from the printer.

Several candidates omitted one or more of the pages from the required printouts. A small number of candidates submitted multiple printouts for some of the tasks and failed to cross out those printouts that were draft copies. If multiple printouts are submitted, Examiners will only mark the first occurrence of that page. It is therefore strongly advised that candidates ensure the Examiners mark the correct version of the work by crossing out any draft copies. This problem was more prevalent in this session than in the June session.

A small number of candidates failed to print the chart. There were some interesting interpretations of the questions, leading to a variety of different, yet correct methods to find solutions to the tasks set. One example of this was the use of different functions to extract the number of guests from the Code in the spreadsheet, with candidates opting to use LEFT functions or MID functions.

Please note that it is not necessary to staple together the work. Work should be submitted in the ARF. Some Examiners experienced difficulty marking some pages from some Centres, as candidates had stapled all their work together in such a way that it was very difficult to separate the sheets in order to view and mark all of the work.

Comments on specific questions

Database creation

Question 1

This was performed well by almost all candidates.

Questions 2 and 3

A small number of candidates did not attempt this using a relational database package. The vast majority of candidates completed this successfully.

Questions 4 and 5

This was performed well by many candidates. The relationships were often created, but in many cases there was no evidence of the relationship types. Successful candidates often showed this on the relationship diagram which indicated the one to infinity symbols or using a screen shot of them creating or editing the relationship. Evidence of editing the existing relationship (after it has been created) is acceptable, but showing the relationship during its creation (but before they have created it) does not demonstrate the completed relationship.

List of managers**Question 6 and 7**

These were performed well by many candidates, although there were a number of accuracy errors in the title of the extract, or in placing the candidate's name, Centre number and candidate number in the correct place on the printout. Some candidates did not adjust the width of the field in the printout so that all of the extracted data within the 4 fields was fully visible.

Summary report / pivot table**Questions 8 to 10**

This was performed well by many candidates. A number of candidates did not create a pivot table, but did extract all of the records in the Qualification field for the four levels of NVQ. There were a number of accuracy errors in the title of the extract, particularly relating to the use of case.

Report on catering employees – first printout**Questions 11 to 18**

The responses to these questions were more variable. A significant number of candidates did not use the greater than 53 and less than 80 criteria in their searching. A number of additional records were discovered in the finished submissions. Some candidates used only a single criterion rather than both criteria within this search. A significant number of candidates failed to calculate the Pay field. A small number of candidates did not select only the required fields for the report. The majority of candidates grouped the report as specified, although the correct subtotals for each group were not calculated successfully by as many candidates. The task in this section causing the candidates the greatest difficulty was the production of the final page total, formatted as currency and with the correct label. Most of the candidates who produced the subtotals and total emboldened these as instructed in **Question 17**.

Report on catering employees - second printout**Questions 19 to 20**

A number of candidates failed to change the report title as specified. Almost all candidates managed to change the controls on the report to a black background. A small number failed to make the individual pay figures invisible; some deleted the field from the report which did not meet the requirements of the question.

Graph**Questions 21 to 23**

This section of the question paper was not completed with the same degree of accuracy as other sections of the paper. A number of candidates failed to perform the search for the correct Branchcodes before embarking upon the production of the chart. The majority of candidates selected the most appropriate type of chart but appropriate scaling of the primary and secondary axes was sometimes omitted. Almost all of the candidates did not fully document the chart. This involved selecting appropriate axis titles (for each of the three axes used), ensuring that all of the category axis labels were fully visible, that the chart had a title which was appropriate, meaningful and of appropriate size proportional to the other elements in the chart. For this chart it was appropriate to include a legend, but few candidates included series labels that were in full and easy for users to read, often preferring the default shorthand labels created in the query summary from the database.

Spreadsheet**Questions 24 to 25**

These questions were performed well by almost all candidates.

Question 26

Some candidates failed to format all of the visible cells in row 7 and all of column A, often omitting the cells below A7. A number of candidates set the cells to either bold, italic or centre aligned but not all three required formatting or alignment.

Question 27

This question was often completed quite well, but not all candidates gained full marks. A variety of methods were used including the use of LEFT and MID functions. In packages where these functions return a string value, candidates were expected to turn this into a numeric value (using the VALUE function or by multiplying the string by 1) to enable this numeric value to be used in subsequent calculations, as the question explicitly asked for “extracts the numeric value”. Few candidates completed this and gained this mark.

Question 28

The vast majority of candidates created a successful nested IF statement to produce the correct results. Some candidates did not add the section of these formulae that would return a zero if the Code was not S or D or B. Some candidates set this to “0” which does not return the numeric value zero, instead placing a 0 character as a string in that cell. A small number of candidates produced the correct results and had referenced cells in columns H to J where it is possible that they had extracted a character using the MID function of the appropriate string but unless the candidates had printed evidence of these ‘working columns’ it was not possible to award any marks.

Questions 29 and 30

These questions were generally answered extremely well, although the comments pertaining to hidden columns in **Question 28** (above) are also equally relevant to these questions.

Question 31

This was performed well by almost all candidates.

Question 32

This was performed well by almost all candidates.

Question 33

This was performed well by the majority of candidates, although some candidates set the currency formatting but not the 2 decimal places. A small number of candidates formatted only some of the required columns.

Question 34

This was performed well by almost all candidates.

Question 35

This was performed well by many candidates, although there were a number of typographical errors. It would be wise for candidates to check their data entry carefully at the end of the examination for accuracy errors.

Question 36

This was performed well by almost all candidates.

Question 37

A significant number of candidates omitted this step, or introduced typographical errors into the text added into the header.

Question 38

Few candidates completed this step completely. The majority arranged the page orientation to landscape, and showed the formulae rather than the values. Some candidates did not show the formulae in full, truncating the formulae by having the column widths too narrow, and only a few candidates showed the row and column headings in their printout.

Hyperlinks

Questions 39 to 42

These questions led to a variety of responses. Many candidates performed well and attained full marks but there were a number of candidates who set the hyperlink from the wrong text (for example: hyperlinking the entire line of text rather than the specified word or words). Some candidates introduced typographical errors into the hyperlinks, the spelling of Design in Hothouse Design, frequently appearing as Desing. Some candidates attempted to set all three hyperlinks as "mailto:" links. There were a number of omissions or typographical errors in the subject line of the final hyperlink.

APPLIED ICT

Paper 9713/03

Written B

General comments

This A2 paper follows on from the AS paper in the depth of subject knowledge and understanding required to be awarded a marking point. It was disappointing that some candidates were not prepared adequately for this examination and displayed only weak subject knowledge and understanding. Other candidates had been better prepared but failed to understand the requirements of the questions or demonstrated poor examination technique. Centres would benefit from focussing on helping their students to read the questions carefully, to identify the keywords in the question, then to compose an answer at the appropriate level. A standards booklet has been produced from the June 2008 session which can help candidates to understand the level of response required.

Many candidates did not apply their answers to the scenarios provided in the question paper. Centres should remember that the subject is Applied ICT. Generic answers which do not apply to the scenario provided will not be awarded marks.

The language used by candidates was of a good standard and caused no concern to marking the scripts.

Comments on specific questions

Question 1

- (a) A basic question requiring candidates to describe (not list) what they should have experienced when using the ROCK-ICT website. Most candidates identified appropriate features of the website, but many candidates either failed to describe the features or provided only a vague description.
- (b) This question was aimed at a higher level of knowledge. It required an understanding of how a bar coded ticket would be printed by a customer and then used at the concert. Few candidates were able to provide a details description of this process within the context of a concert ticket website.
- (c) This question related to a common use of ICT; an online auction site. Despite the fact that most candidates would have had experience of this, many candidates did not demonstrate the necessary subject knowledge and understanding about this applied use of ICT.
- (d) This question is concerned with advantages and disadvantages of online services. Unlike other questions on the paper the candidates are instructed that they can discuss these services in general and therefore answers did not have to relate specifically to the scenario provided. As the question asked for a discussion of the advantages and disadvantages, both needed to be covered for the candidates to be awarded full marks.

Question 2

- (a) This question should have been relatively straightforward for candidates, but few obtained high marks. It required candidates to describe the use of video conferencing in a business environment. In a scenario of ROCK-ICT communicating with its stars via video conferencing, candidates should expect high quality equipment to be available, i.e. large displays for the images, high quality cameras, high bandwidth data links and not an internet connection with poor quality. Many candidates gave generic answers relating to video conferencing without considering the context of the question.
- (b) The question required a description of the systems that Rock ICT could put in place to reassure its customers. The subject of data security appears on the IGCSE syllabus, however the depth of understanding and description expected at A2 is much higher. Many candidates gave marks which

may have received credit at IGCSE, but which were not in sufficient detail to be awarded marks at this level.

Question 3

- (a) This question was well answered and many candidates scored well here.
- (b) The answers needed to refer to the scenario; few candidates understood what 'purpose built' meant in this context.
- (c) Only a few candidates appreciated the hardware required to drive a simulator. Many candidates gave answers which related to the scenario of a computer game and not the full-scale realistic commercial simulators which would be used to train pilots in this context.

Question 4

- (a) The use of computers to gather information about the weather is not a difficult a subject and it was very disappointing that only a few good answers were seen.
- (b) This section was badly answered. Candidates need to be taught a range of real life computing processes as set out in the syllabus.
- (c) Many candidates failed to appreciate that this question was about long term predictions of climate change and not the production of short term weather forecasts; these candidates did not appear to have read the question carefully and were not awarded marks as a result.

Question 5

- (a) At A2 a list of the recognised techniques must not be given in the hope of being awarded marks. The question asks for a description and it must be in the context given in the question and scenario. Many candidates failed to gain as many marks as they might have done by either not giving descriptions or by failing to give answers in the context of a travel agency.
- (b) The question was not answered well by a large number of candidates, who appeared to have little knowledge of the methods of changeover.
- (c) This question was answered reasonably well but some candidates lost marks by giving generic answers rather than answering within the context of helping Dhesi travel agency staff to overcome these risks.

Question 6

- (a) Only a few candidates appreciated the advantages and disadvantages of computerised passports. Many candidates did not appear to have been taught the subject at all.
- (b) Passport are a feature of everyday life and it was expected that candidates would know the information held in such a document. However, many candidates did not achieve as many marks as had been expected.

Question 7

An open ended question to end the examination; this gave candidates the opportunity to show how they appreciate and might have experienced the use of ICT. Most candidates should have been able to think of and describe some of the effects of the Internet on the growth of air travel.

APPLIED ICT

<p>Paper 9713/04</p> <p>Practical Test B</p>
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General comments

Most candidates seemed very well prepared for the application and integration skills required for this paper; very few, however, attempted the final automation task.

A number of candidates lost marks by failing to supply sufficiently detailed evidence. In particular many seemed unable to show the full field codes. Similarly many candidates lost marks by not providing sufficient evidence of their methods for selecting recipients for a mail merge and enough functional detail for a new user of the "Menu" system.

Comments on specific questions

Tasks 1-7 Spreadsheet structure and formulae

In general this section was completed well by all candidates with very few omissions or errors. Candidates were careful with the layout and formatting of the table and had very little difficulty with the formulae. The discount calculation was where some candidates lost most marks; this may have been more the result of a lack of experience of this method of discounting than with the formula itself.

Tasks 8-10 Data entry and production of quotations

The accuracy of the data entry was checked in the printouts of the quotations and the mail merged documents. 100% accuracy of the data provided was required.

Tasks 11-12 Production of letters to customers

Candidates were required to "Paste Link" data from one data source and mail merge recipients from another. This was done successfully by the majority of candidates. However, whilst evidence of the mail merge codes was usually provided, some candidates failed to use the option to display the full field codes and thus failed to provide enough evidence of the paste linking or the use of the conditional field.

The selection of recipients for the mail merge was by a search or a filter for customers with an address in the Doddsey Business Park. In general where selection of recipients is required evidence of the selection **method** is required. Screenshots of the final recipients list is not acceptable as evidence of the selection method because they provide no evidence of the method used and could be created from a manually typed data source.

Task 13 Production of labels

Candidates were required to produce address labels for selected recipients and provide evidence of the selection method. This was done well by most candidates. Where marks were lost it was usually for failing to ensure there was only one address field per line. This is a requirement for which candidates could be better prepared since it applies in almost all circumstances where an address is included.

Task 14 The creation of a menu for the selection of tasks

The creation of the menu required inclusion of items and explanations of their functions. This was done well by many candidates but some failed to recognise that a simple statement of the document or file to be opened was not adequate. The explanation must have been sufficient for a new or non-technical user to understand the selection. For example: "....to open the data source" was not taken as acceptable unless some description of what the source contained was given. This should have included the information that

the file contained details of the customers and records of their orders. “....to print letters” needed further explanation that the letters were providing updated information about the items available for hire and offers of further discounts.

The question paper included instructions to save some files with specified names. These were checked by the file references used in the Menu document. Some candidates did not use the names as specified. Those who used different file names were penalised at this point. At this level candidates should be made aware that when simulating a business solution it is important to stick to the specification supplied. In general candidates need to be careful to follow all instructions within the question paper to avoid losing marks unnecessarily.

Task 15 Automation of the production of labels

Very few candidates attempted this task which at the simplest level required only a macro to be recorded of the steps used in task 13 and then renamed. Some candidates added the new menu item as required but failed to provide any evidence of the code that would be invoked.

Task 16 Evidence document

Many candidates failed to produce a single document to provide their evidence and resorted to individual pages with screenshots as required. It should be noted that the question paper specifically states that candidates should use an evidence document, and candidates were even given the filename for this document. As long as their candidate details were in the header of each of the pages, credit was given to the candidates wherever possible.